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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,106	09/04/2001	Troy J. Liebl	114293-1623	1742

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EXAMINER
PEREZ DAPLE, AARON C

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/944,106	LIEBL ET AL.
	Examiner	Art Unit
	Aaron Perez-Daple	2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 5-17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 5-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This Action is in response to Amendment filed 1/20/04, which has been fully considered.

2.   Claims 2-4 and 18-20 are cancelled by Applicant.

3.   Claims 1 and 5-17 are presented for examination.

4.   This Action is made FINAL.

Response to Arguments

5.   Applicant's arguments with respect to claims 1 and 5-17 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   **Claims 1, 12 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Seashore et al (US 5,916,286) (hereinafter Seashore) in view of McMahon (US 5,965,658).

8.   As for claims 1 and 17, Seashore discloses a diagnostic tool, comprising:

a data input port [port, 39, Fig. 3];

a microprocessor linked to said data input port [microcontroller, 31, Fig. 3];

a data storage device linked to said microprocessor wherein a diagnostic application

program can be stored in said data storage device [SRAM, 35, Fig. 3];

a graphical user interface linked to said microprocessor wherein said microprocessor

receives diagnostic data from said data input port, stores said data to said data storage device,

and provides output data to be displayed on said graphical user interface, wherein said output

is displayed on said graphical user interface as a list having an identification of one or more

diagnostic values and the corresponding diagnostic value [col. 3, lines 13-17, "The

information stored...the automobile status."; col. 6, lines 37-45, "A second group...confirms

an option."].

Seashore does not specifically disclose a list of diagnostic values wherein an input device

can be used to select a diagnostic value to change a placement location of the selected

diagnostic value within an order of the list. McMahon teaches a list of diagnostic values

wherein an input device can be used to select a diagnostic value to change a placement

location of the selected diagnostic value within an order of the list [col. 6, lines 12-26, "Once

the data is...order of download."; col. 10, lines 8-47, "There are two modes...pop-up menu

appears...."]. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Seashore by using a list of diagnostic values wherein an input device can

be used to select a diagnostic value to change a placement location of the selected diagnostic

value within an order of the list, because this would allow the user to select the order in

which measurements are taken, as taught by McMahon [col. 6, lines 12-26, "Once the data

is...order of download."].

9.   As for claim 12, Seashore discloses a method of displaying diagnostic data, comprising

the steps of:

displaying a list of diagnostic values on a graphical user interface of a handheld

diagnostic tool wherein said list includes an identification of each diagnostic value [col. 3,

lines 1-17, "The portable automobile diagnostic...the automobile status."];

selecting a first diagnostic value from the list of displayed values [col. 3, lines 8-11, "The

automobile make and model...in the flash memory."; col. 6, lines 37-45, "A second

group...confirms an option."].

Seashore does not specifically disclose changing a placement location of the first selected

diagnostic value within an order of the list. McMahon teaches changing a placement location

of the first selected diagnostic value within an order of the list [col. 6, lines 12-26, "Once the

data is...order of download."; col. 10, lines 8-47, "There are two modes...pop-up menu

appears...."]. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Seashore by changing a placement location of the first selected

diagnostic value within an order of the list, because this would allow the user to select the

order in which measurements are taken, as taught by McMahon [col. 6, lines 12-26, "Once

the data is...order of download."].

10.   **Claims 5-7, 10 and 13-15** are rejected under 35 U.S.C. 103(a) as being obvious over

Seashore in view of McMahon and in further view of Borsuk (US 5,475,399).

As for claim 5, neither Seashore nor McMahon specifically teach using an input device to

change the font of an entry in a list of diagnostic values. However, Borsuk teaches using an

input device to change the font of entries in a display of a hand held portable unit [col. 2, line

51 – col. 3, line 6, "The present invention...displayed on the screen."].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Seashore and McMahon by using an input device, such as the keypad, to

change the font of an entry in the list of diagnostic values in order to accommodate the needs

of visually impaired or visually strained individuals, as taught by Borsuk [col. 2, lines 17-23,

It should be realized…his or her needs."].

11.   As for claim 6, Seashore discloses a diagnostic tool similar to that of claim 5 wherein

said data input port links to and receives data from an onboard vehicle computer [Fig. 1; col.

4, lines 45-53, "FIG. 1 is an illustration…to automotive computer 12."].

12.   As for claim 7, Seashore discloses a diagnostic tool similar to that of claim 6 wherein

said data storage device includes a flash memory card [flash memory, 34, Fig. 3] and wherein

said diagnostic application program is loaded on said flash memory card prior to inserting

said flash memory card into said diagnostic tool [col. 8, lines 24-25, "ROM 37 and a

portion…diagnostic tool 30."].

13.   As for claim 10, Seashore discloses a diagnostic tool similar to that of claim 9 further

comprising a transmitter connected to said microprocessor for wirelessly transmitting data

[col. 4, lines 53-56, "An alternate to cable 15…provide cableless communications."].

14.   As for claim 13, neither Seashore nor McMahon specifically teach changing the font of a

selected diagnostic value. However, Borsuk teaches changing the font of selected values in a

display of a hand held portable unit [col. 2, line 51 – col. 3, line 6, "The present

invention…displayed on the screen."].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Seashore and McMahon by changing the font of a selected diagnostic

value in order to accommodate the needs of visually impaired or visually strained

individuals, as taught by Borsuk [col. 2, lines 17-23, It should be realized...his or her

needs."].

15.   As for claim 14, Seashore discloses the method of claim 13 further comprising the step of

loading a diagnostic application program into a memory device of said diagnostic tool [col. 5,

line 63 – col. 6, line 6, "A programmable automobile...time on a vehicle."].

As for claim 15, Seashore discloses the method of claim 14 further comprising the step of

storing a third diagnostic value into said memory device and displaying said third selected

diagnostic value graphically over at least one axis [col. 3, lines 8-11, "The automobile make

and model...in the flash memory."; col. 6, lines 37-45, "A second group...confirms an

option."].

16.   **Claims 8 and 9** are rejected under 35 U.S.C. 103(a) as being obvious over Seashore in

view of McMahon in further view of Borsuk and in further view of Danielson et al (US

5,895,906) (hereinafter Danielson).

As for claim 8, Seashore teaches the use a hardware interface port for interfacing with

various hardware systems and for downloading software applications [port, 39, Fig. 3; col. 7,

lines 37-60, "Portable automobile diagnostic...codes stored therein."]. However neither

Seashore nor Borsuk specifically disclose the use of a hardware interface module with

memory for storing a software application in conjunction with the hardware interface port.

However, Danielson teaches the use of a hardware interface module with memory for storing

a software application in conjunction with a hardware interface port [col. 3, lines 38-42, "A

feature of the...concerning a transaction."].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Seashore, McMahon and Borsuk to include a hardware interface port module containing a diagnostic application program and wherein the diagnostic tool contains a hardware interface port for receiving said hardware interface port module, because this would allow a user to interact with a central processing station, as taught by Danielson [col. 1, lines 58-64, "In another aspect...computer processing station."].

17.   As for claim 9, neither Seashore nor Borsuk specifically disclose a diagnostic tool wherein a plurality of hardware interface port modules having separate diagnostic application programs can be provided for connection, at different times, to said hardware interface port. However, Danielson teaches the use of a plurality of hardware interface port modules having separate diagnostic application programs which can be provided for connection, at different times, to said hardware interface port [col. 3, lines 18-24, "The computer processor...hand-held unit."]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Seashore, McMahon and Borsuk to include the use of a plurality of hardware interface port modules having separate diagnostic application programs which can be provided for connection, at different times, to said hardware interface port because this would allow a user to interact with a central processing station or stations, as taught by Danielson [col. 1, lines 58-64, "In another aspect...computer processing station."].

18.   **Claim 11** is rejected under 35 U.S.C. 103(a) as being obvious over Seashore in view of McMahon in further view of Borsuk and in further view of Herrod et al (US 6,405,049) (hereinafter Herrod). Neither Seashore, McMahon nor Borsuk specifically disclose the use

an infrared transmitter wherein said data is wirelessly transmitted to a printer. However,
Herrod discloses the use of an infrared transmitter for wirelessly transmitting data to a printer
[Fig. 10; col. 17, lines 27-49, "The wireless communications...range for the terminal."].

It would have been obvious to one of ordinary skill in the art at the time the invention
was made to modify the teachings of Seashore, McMahon and Borsuk to include the use of
an infrared transmitter for wirelessly transmitting data to a printer, as taught by Herrod, in
order to allow the operator to generate a paper copy of diagnostic data over a wireless
network.

19.   Claim 16 is rejected under 35 U.S.C. 103(a) as being obvious over Seashore in view of
McMahon in further view of Borsuk and in further view of Gurne et al (US 5,541,840)
(hereinafter Gurne).

Neither Seashore nor Borsuk specifically disclose displaying a diagnostic value using a
graph with an axis, nor changing the scale of the axis. However, Gurne discloses displaying
a diagnostic value using a graph with an axis wherein the scale of the axis can be changed
[Fig. 12; col. 16, lines 41-65, "As shown in FIG. 12...costly test equipment."].

It would have been obvious to one of ordinary skill in the art at the time the invention
was made to modify the teachings of Seashore, McMahon and Borsuk to include displaying a
diagnostic value using a graph with an axis wherein the scale of the axis can be changed,
because this would allow the operator to view diagnostic information as it changes over time,
as taught by Gurne [col. 16, lines 52-61, "Since the data...events or occurrences."].

Conclusion

20.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. US 6,295,492 B1, note teaches changing display order; US 6,408,302 B1, note

teaches changing display order.

21.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of

this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aaron Perez-Daple whose telephone number is 703-305-

4897. The examiner can normally be reached on 9am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Anil Khatri can be reached on 703-305-0282. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information

for unpublished applications is available through Private PAIR only. For more information

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to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free).

3/1/04

Aaron Perez-Daple

3/2/04

RAMESH PATEL
PRIMARY EXAMINER

For Anil Khatri